Computer Programming Languages

March 2021

Knowing the Code

Information Technology occupations are some of the most in demand occupations in Missouri. Computer programming, developing, and support occupations employed more than 88,000 people at an average wage of $79,860 in 2019 (Occupational Employment Statistics estimates). Employment in Information Technology occupations is projected to grow 13.4 percent from 2018-2028 (MERIC Long-Term Employment Projections).

From March 1, 2020 – Feb. 28, 2021, there were over 45,000 online job ads in Missouri for selected IT occupations (Burning Glass Technologies). Programming skills are highly valued in these occupations. The majority of job ads for these occupations request applicants are proficient in various computer-programming languages. Top requested programming languages include SQL, Java, and Python, most commonly found in job ads for Applications Software Developers and Computer Systems Engineers and Architects.

Top 20 Requested Programming Languages in Computer Occupations		
Skill	**Language Type**	**Online Job Ads**
SQL	Database Language	10,324
Java	Programming Language	8,980
Python	Programming Language	5,826
JavaScript	Programming Language	5,429
Oracle	Database Language	4,772
Linux	Other - Operating Systems	4,376
C#	Programming Language	3,321
Git	Programming Language	3,263
SQL Server	Database Language	2,796
Atlassian JIRA	Programming Language	2,396
.NET	Programming Language	2,336
UNIX	Other - Operating Systems	2,319
SAP	Other - Enterprise	2,048
Microsoft PowerShell	Other - Operating Systems	1,894
Extensible Markup Language (XML)	Other - Markup Language	1,865
NoSQL	Database Language	1,677
PostgreSQL	Database Language	1,662
JavaScript Object Notation (JSON)	Programming Language	1,657
C++	Programming Language	1,638
AngularJS	Other - Markup Language	1,588

Source: Burning Glass/Labor Insight, online job ads Mar. 01, 2020 - Feb. 28, 2021

Who's Hiring?

Top Industries		
NAICS Code	**Industry Title**	**Job Postings**
541	Professional, Scientific, and Technical Services	5,629
522	Credit Intermediation and Related Activities	1,828
336	Transportation Equipment Manufacturing	1,390
524	Insurance Carriers and Related Activities	1,069
523	Securities, Commodity Contracts, & Other Financial Investments	1,050
622	Hospitals	866
561	Administrative and Support Services	833
511	Publishing Industries (except Internet)	734
611	Educational Services	657
928	National Security and International Affairs	582

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Top Employers

The Boeing Company
Wells Fargo
Technology Partners
Deloitte
Charter Communications
MasterCard Worldwide
Cerner Corporation
Edward Jones
Leidos
Bayer Corporation

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Industries with the most job postings for Information Technology occupations included Professional, Scientific, and Technical Services and Credit Intermediation and Related Activities. The top employer was Boeing, followed by Wells Fargo and Technology Partners.

Skill Profile

Python – is an interpreted, object-oriented, high-level programming language with dynamic semantics. Python is designed to be easy to read and simple to implement. Python supports modules and packages, which encourages program modularity and code reuse. Its formatting is visually uncluttered, and it often uses English keywords where other languages use punctuation. Python is most commonly requested in job ads for Applications Software Developers, Computer Systems Engineers and Architects, and Database Administrators. Employers requesting Python in online job ads include Boeing, Wells Fargo, and Technology Partners.

This report uses annual data from the Bureau of Labor Statistics where there is a time-release lag to ensure all data is reported in from various sectors and geographic locations.